

## ABSTRACT

### LIQUID CRYSTAL MICRO DISPLAY

The invention relates to liquid crystal matrix micro displays, and in particular those which are embodied on a monolithic silicon substrate in which are integrated the electronic circuits for control of a matrix array of liquid crystal cells.

The matrix comprises, for each dot at the crossover of a row and of a column, an elementary electronic circuit for controlling an elementary liquid crystal cell situated at this crossover. This circuit comprises at least one storage capacitor (Ca, Cb) for storing for the duration of an image frame an analogue voltage applied by the column, a first terminal of the storage capacitor being linked to the gate of the transistor (Ta, Tb), and, in series between two voltage supply terminals, an elementary current source (SC1) and a switching transistor (Ta, Tb), the drain of the switching transistor being linked to the liquid crystal cell (LC). A periodic voltage ramp, common to all the cells of at least one row, is applied to a second terminal of the storage capacitor of the cells of this row.

Figure for the abstract: Figure 2